



INSTALLATION



MAINTENANCE

# Domestic Biogas to Improve Rural Livelihood in Ethiopia

## Summary

|                    |                    |
|--------------------|--------------------|
| Country            | Ethiopia           |
| Implementer        | Hawassa University |
| Target groups      | Farmers            |
| Duration           | 10/2019 – 10/2021  |
| Type of energy use | Other              |

## Challenge

In the two Ethiopian districts of Damot Woyde and Dugna Fango, more than 75 % of the population live from agriculture. About 95 % of the people depend on biomass for energy. They use this mainly in the form of firewood which they use primarily for cooking, but wood is becoming increasingly scarce. The situation threatens people's livelihoods because wood is becoming more expensive due to the scarcity. The fertility of the soil also decreases because people burn dung and plant residues as an alternative.

## Impact Logic

The project is led by Hawassa University, which is located in the capital of the Southern Nations, Nationalities, and Peoples' Region (SNNPR) – Hawassa. Among other things, Hawassa University is committed to knowledge and technology transfer and cooperates with numerous national and international partners. Currently, the university is implementing 51 projects. The two project districts belong to the SNNPR. In order to spread the use of biogas plants as much as possible, the project informs the people in the district comprehensively about the advantages and prerequisites of biogas plants. This is important because under this project, interested people have to pay 10% - 20% of the costs of the plant themselves, depending on their financial circumstances. In the second step, the project trains

designers who learn how biogas can be produced and used, and how to construct and complete a biogas plant. The know-how acquired is to be used to improve the employment opportunities of the participants or to enable them to become self-employed. The project aims to build up to 100 domestic biogas plants and train about 50 local micro-entrepreneurs to build and distribute these plants. Thus, apart from clean energy, the project also promotes employment possibilities.

## Innovative Project Element

So far biogas has been underutilized in Ethiopia. The project not only expands domestic biogas usage to two new districts, but also includes elements on capacity building. The project enables local farmers to become more resilient to energy shortages and set up their own energy production. This way local farmers are able to expand the national biogas system and further sustainable energy approaches like bio gas on their own. For the project two different sizes of biogas plants (8 m<sup>3</sup> and 6 m<sup>3</sup>) are used, depending on household specific livestock holding and dung supply.

## FURTHER INFORMATION

[www.gruene-buergerenergie.org](http://www.gruene-buergerenergie.org)

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